



## REMARKS

U.S. Patent No. 944,000 to Schonich discloses a ladder rung apparatus which is beyond the scope of the present invention. The present invention is a metal fireblock whereby the patent to Schonich is a ladder. While the Schonich patent has ladder rungs, the rungs are beyond comparison to the present invention because they are shaped differently, correspond in only use with a ladder, and are for one specified size, the size of a ladder.

U.S. Patent No. 1,823,509 to Peters teaches a replaceable ladder rung. This device is for ladders and there is no mention of different sizes for this device. Its shape and fastening mechanism are completely different from the present invention. The present invention has an upper and lower flange assembly to connect between studs while the patent to Peters discloses the connecting parts to both sides of a ladder. The Peters patent uses a bolt to connect the two sides of a ladder whereby the present invention uses nails. There is only one bolt hole in the Peters patent and there are several nail holes on each side of the metal fireblock of the present invention.

Both the Schonich and Peters patents are for ladders and their intended use is in conjunction with ladder manufacture. The present invention is for the support of vertical wall studs and for the prevention of the spread of fire inside the vertical wall space. Referring to the Peters patent, the Office Action made a mistake in stating that holes 8 and 9 are nail holes. The disclosure shows that the holes are bolt holes. The present invention does not have bolt holes, but instead nail holes, approximately 12 per side. The Peters patent also shows channel flanges to add support, but the flanges are not made from an extrusion process to the present invention, but are simply bent 90 degrees from the main body 3.

Neither the Schonich patent or the Peters patent described any size of length or width in the disclosures. The present invention discloses two length sizes of the metal fireblock and these sizes

are stated to be  $14\frac{1}{2}$  inches long and  $22\frac{1}{2}$  inches long. Due to the fact that the sizes are recited in the present invention, this disclosure indicates a structural difference between the claimed invention and the prior art to patentably distinguish the claimed invention from the prior art.

The prior art is certainly not capable of performing the intended use of the present invention for the reason that the prior art design is length limited to the size of a ladder width and the depth of the ladder rungs does not cover the  $3\frac{1}{2}$  inch depth of a 2 x 4 wall. Thereby the prior art design cannot slow down the spread of fire. The Schonich patent discloses ladder rung supports which are not of solid metal, but are short supports that wood fits into. Claim 2 of the present invention states that the metal fireblock of claim 1, whereby the fireblock is of one piece of metal. The Peters patent is of one piece metal but the difference in shape and design as well as too narrow depth make it impossible to stop the spread of fire if installed into a wall between vertical studs. The Peters patent has a lower support arm flange but lacks an upper support arm to properly fasten to a vertical stud. The Peters patent is a ladder rung and not a metal fireblock. The Schonich patent is a ladder rung bracket assembly which does not extend out far enough to connect to both vertical ladder boards. It is only a small bracket which uses wood to space the distance apart between ladder boards. It cannot stop the spread of fire because it is made of a wood connected to bracket assembly.

Referring to U.S. Patent No. 1,867,449 to Eckert, the metal fireblock to Eckert discloses horizontally disposed outer flanges which are to be connected to the depth or thickness of a framing 2 x 4. The present invention does not have any outside protruding metal pieces that cover the depth or thickness of a 2 x 4. This patent also enables the metal to be bent to fit a certain width. The present invention does not have any bendable parts.

U.S. Patent No. 4,791766 to Egri discloses a metal fire stop for use in metallic studding. This device has no fasteners, no nail holes and is a flatlike surface. It is made to be twist locked into position of locked inter-engagement with associated vertical metallic studding.

U.S. Patent No. 5,189,857A to Herren discloses a flush mount bridging and backing bracket for metallic studding. This device has no flanged connecting arms as does the present invention and is made for attaching to metal studs. The present invention is for use with wood framing.

U.S. Patent No. 2,442,726 to Gastalder discloses a bridging metal brace for floor joists. This device cannot possibly stop a fire and is not a blocking device. This patent is a brace for 2 x 4s 6s 8s and the like. It is primarily used on floor joists and is only about 1 inch wide. This patent is beyond the scope of the present invention.

U.S. Patent No. 5,142,920A to Hess discloses a brace for connecting laterally spaced beams. This device wraps around the top and sides of a beam and completely surrounds the connecting beam. This patent does not suffice as a fireblock or its equivalent and is beyond the scope of the present invention.

U.S. Patent No. 5,884,448 to Pellock discloses a truss spacer which adds strength to the framing of a wood structure. This patent differs from the present invention in that the Pellock patent does not have a full width of a stud and cannot block fire. This device has integral nails formed in its manufacture and external tabs which go well beyond the width of a framing vertical wall stud. Furthermore, the purpose of this patent is to brace or frame vertical or horizontal studs.

U.S. Patent No. 2,294,114 to Black discloses a fireproof fire-block. This patent differs dramatically from the present invention in that it has holes in the left and right of center. The adjustability of the device are seen as a raised piece of metal 21 and 22 which can bend to enable a longer or shorter distance needed

to assist in proper distance spacing. The present invention is not adjustable, but has two fixed lengths to work with two different framing specifications. The adjustability of the Black patent cannot stretch to fit both sizes of the present invention. The Black patent has exterior nail on flanges whereby the present invention has interior nail on flanges.

U.S. Patent No. 3,334,461 to York discloses a fire baffle for walls. This device has no fasteners or holes for nails. It has protruding sharp fins at the end of the baffle on both sides. It is a long piece of metal meant to jam in to two vertical studs at an angle. The present invention connects to vertical studs on a perfectly flat plane. This device also has holes at either end and the present invention does not.

U.S. Patent No. 4,637,195 to Davis discloses a reinforcing member for wooden structure. This patent is used for outside bracing of traditional 2 x 4 or 2 x 6 wall framing. This patent does not cover the total inside depth of a 2 x 4 or a 2 x 6 and is mainly used on an angle as a cross member brace. Its depth is about one inch inside the stud.

U.S. Patent No. 4,608,801 to Green is a floor bracing member for a ceramic tile floor. This patent discloses that it is for bracing floors spaced at 24 inches on center. This differs from the present invention by size alone whereby the present invention has two sizes  $14\frac{1}{2}$  and  $22\frac{1}{2}$  inches. This patent is not a fire and or space blocking device, but a bracing device for floors. It does not cover the depth of a 2 x 4 or larger. It is made to strengthen floors where ceramic tiles exist.

U.S. Patent 142,881 to Dyar discloses a one piece fire stop metal corrugated device to stop fire in walls. There are no nail holes or nail on fasteners. Instead the device comes equipped with metal teeth whereby if the fire stop is hit with a hammer, the teeth will lock into the 2 x 4 vertical studs. This device is a single piece of flat corrugated metal with no flanges or nail on devices. For this purpose it differs from the present invention.

U.S. Patent No. 4,155,312 to Thorkildson discloses an adjustable shelf that is two piece and is extendable. This drastically differs from the present invention because this device does not block fire and is not made to. The present invention is not adjustable but comes in two sizes. The fastening capability of the Thorkildson patent relies on upward flanges to be secured with screws or nails and there are hole perforations. There are two nail or screw holes in this patent. The present invention has 12 holes per side. The present invention is a one piece metal fire-block whereby the Thorkildson patent is a two piece invention.

U.S. Patent No. 498,563 to Montgillion discloses an adjustable fire stop for walls of frame houses. This device is a two piece fire stop whereby the nail on portions are supplied with two holes per side. The present invention has 12 holes per side. The flange on the Montgillion patent is only in one direction, whereby the present invention has nail on flanges in both the top and bottom direction. The size of the nail on flanges of the present invention is at least 4 times in distance to the Montgillion patent. There are no extruded metals on the reference patent. The present invention also strongly differs by the fact it is of one piece of metal.

U.S. Patent No. 1,412,736 to Hamilton discloses a two piece metal fire block. This differs from the present invention whereby the present invention is of one piece metal. The Hamilton patent has two upward position nail on flanges with built in brads to secure to the 2 x 4 by hammering the brads into the wood. The present invention has 12 nail holes per side and the nail on flanges are in the upward and downward position. The present invention differs strongly from the prior art.

U.S. Patent No. 1,433,606 to Dyar discloses a patent given to J. Werner Jr., entitled Reels for Harvesters. This patent is completely beyond the scope of the present invention.